(19) World Intellectual Property Organization

International Bureau





(43) International Publication Date 16 June 2005 (16.06.2005)

PCT

(10) International Publication Number WO 2005/055607 A1

- (51) International Patent Classification7: H04N 7/24, 13/02
- (21) International Application Number:

PCT/KR2004/002917

(22) International Filing Date:

11 November 2004 (11.11.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 10-2003-0088541

8 December 2003 (08.12.2003) KR 10-2004-0024923 12 April 2004 (12.04.2004) KR

(71) Applicants (for all designated States except US): ELECTRONICS AND TELECOMMUNICATIONS RESEARCH INSTITUTE [KR/KR]; 161 Gajeong-dong, Yuseong-gu, Daejeon 305-350 (KR). HANYANG UNI-

VERSITY [KR/KR]; 17 Haengdang-dong, Seongdong-gu,

(72) Inventors; and

Seoul 133-070 (KR).

(75) Inventors/Applicants (for US only): KIM, Wook-Joong 101-603, Jangdae-dong, [KR/KR]; Dreamworld Apt. Yuseong-gu, Daejeon-city, 305-308 (KR). Myung-Seok [KR/KR]; 3011, 146-12 Sinseong-dong, Yuseong-gu, Daejeon-city 305-804 (KR). Kyu-Heon [KR/KR]; Saemmeori Apt. 201-904, Dunsan-dong, Seo-gu, Daejeon-city, 302-120 (KR). KIM, Jin-Woong [KR/KR]; Expo Apt. 305-1603, Jeonmin-dong, Yuseong-gu, Daejeon-city, 305-309 (KR). JANG, Euee-Seon [KR/KR]; R & D Bldg. 501, Hanyang Univ., Hangdang1-dong, Seongdong-gu, Seoul, 133-791 (KR). LEE, Sun-Young [KR/KR]; R & D Bldg. 707,

Hanyang Univ., Hangdang1-dong, Seongdong-gu, Seoul 133-791 (KR). **OH, Hyun-Jong** [KR/KR]; R & D Bldg. 707, Hanyang Univ., Hangdang1-dong, Seongdong-gu, Seoul 133-791 (KR). **PARK, Sung-Won** [KR/KR]; R & D Bldg., 707, Hanyang Univ., Hangdang1-dong, Seongdong-gu, Seoul 133-071 (KR). **WON, Jong-Woo** [KR/KR]; R & D Bldg. 707, Hanyang Univ., Hangdang1-dong, Seongdong-gu, Seoul 133-791 (KR).

- (74) Agent: YOU ME PATENT AND LAW FIRM; Seolim Bldg., 649-10 Yoksam-dong, Kangnam-ku, Seoul 135-080 (KR).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: SYSTEM AND METHOD FOR ENCODING AND DECODING AN IMAGE USING BITSTREAM MAP AND RECORDING MEDIUM THEREOF

(57) Abstract: Disclosed are a system and method for encoding and decoding an image. The image compression system includes an image segmentation unit (110) for segmenting a first image into a plurality of sub-images; a first encoding unit (120) for encoding the sub-images to output sub-image bitstreams; a BMAP construction unit (130) for calculating the quantity of information of each sub-image bitstream and generating BMAP information using the calculated quantity of information and information on construction of each sub-image; and a bitstream combining unit (150) for combining the sub-image bitstreams and BMAP information.



